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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/031,687	06/21/2002	Galen M. Gareis	6500-1805.3	8690

7590

04/09/2003

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EXAMINER

NGUYEN, CHAU N

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 04/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/031,687

Applicant(s)

GAREIS, GALEN M.

Examiner

Chau N Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stine et al. (4,096,346) in view of Baker et al. (5,434,354).

Stine et al. discloses a shielded pair cable comprising an insulated pair cable (Fig. 5), a shielding tape being a composite tape, the shielding tape having a metal thickness of 0.33 to 2.00 mils (col. 3, lines 1-2), the shielding tape being wrapped around the pair at a tension that eliminates a substantial amount of the air and leaves a cross-sectional void area of less than 25% of the cross-sectional area of the shielded cable. Stine et al. does not specifically disclose the insulated conductors of the pair cable being twisted, nor the shield being helically wrapped with an overlap (re claims 1,10&11). Baker et al. discloses a cable comprising insulated conductors which are twisted into twisted pairs, and a shielding tape (105) which is helically wrapped with an overlap around the twisted pairs. It

would have been obvious to one skilled in the art to twist the insulated conductors of Stine et al. as taught by Baker et al. to reduce the cross-talk among the pair. It would also have been obvious to one skilled in the art to modify the shielding tape of Stine et al. by helically wrapping the tape with an overlap around the twisted pair as taught by Baker et al. to improve the shielding effect in the cable.

The modified cable of Stine et al. also discloses the cross-sectional void area less than 18% (re claim 3) and the shielding tape having a metal thickness of 0.75 to 1.25 mils, the shielding tape having a width of 0.5 to 1.5 inches and helically wrapped with the overlap of 25% at an angle of 30-45 degrees (see Baker et al.) (re claims 4, 5, 7, 14), at least four of the helical shielded twisted pair cables, a jacket surrounding the at least four twisted pair cables (see Stine et al.) (re claims 6, 12, 15&16). Re claims 8 and 14, it would have been obvious to one skilled in the art to wrap the modified shielding tape of Stine et al. with an overlap of 45% to secure the turns together since it has been held that discovering the optimum or workable range involves only routine skill in the art. In re Aller 105 USPQ 233. Re claim 9, Stine et al. discloses the cable being bundled prior to being jacketed.

Re claims 1, 2, 6, 10, 11, and 17, the characteristics and the properties recited in these claims are inherent from the modified cable of Stine et al. since it comprises structure and material as claimed. Regarding the standard impedance

deviation, it would have been obvious to one skilled in the art to choose suitable standard impedance deviation for the modified cable of Stine et al. to meet the specific use of the resulting cable since it has been held that discovering the optimum or workable range involves only routine skill in the art. In re Aller 105 USPQ 233.

Cited Art

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kenny et al. and Siekierka et al. discloses twisted pair cables.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 308-0693. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (703) 308 3682. The fax phone numbers for the organization where this application or proceeding is

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assigned are (703) 305 3432 for regular communications and (703) 305 1341 for
After Final communications.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the receptionist whose telephone number is (703)
308-0956.



Chau N Nguyen
Primary Examiner
Art Unit 2831

CN
April 4, 2003